Initial Care of Newborns Born to Pregnant Persons with Suspected or Confirmed COVID-19

This guidance addresses the care of newborns born to pregnant persons with suspected (COVID-19 pending test results) or confirmed (positive COVID-19 test) COVID-19.

On arrival of a pregnant person who is suspected or confirmed COVID-19, alert pediatric staff (i.e. Neonatal Intensive Care Unit (NICU) delivery team or attending pediatric staff) of obstetrical patient’s status and where the neonate is anticipated to be admitted after delivery.

- If delivery is not imminent, alert NICU team/pediatric staff every shift to obstetrical patient’s status and location.
- When delivery is imminent, the Labor and Delivery Room (LDR) staff alerts the pediatric resuscitation team. The Neonatal Resuscitation Program delivery equipment should be prepared before delivery.

Delivery Room Management of Neonates

Staff attending a birth when the patient is suspected or confirmed COVID-19 should wear a gown, gloves, N-95 respiratory mask (if available), and eye protection (face shield or goggles). Personal eyeglasses are not adequate protection. The protection is needed due to the likelihood of maternal virus aerosols and the potential need to perform newborn resuscitation that can generate aerosols. Aerosol generating procedures for the neonate include: bag-mask ventilation, intubation, suctioning, continuous positive airway pressure and/or positive pressure ventilation. If intubation is required, the most experienced person should intubate.

After delivery, the neonate is stabilized on the warmer, and placed in an isolette for transport and admission to the designated newborn nursery or NICU room (See Algorithm).

Temporary separation of the patient and newborn will minimize the risk of postnatal infection from maternal respiratory secretions. The benefits of temporary separation may be greater in patients with more serious illness. Any temporary separation of the patient and newborn is challenging. A discussion with the parent should occur, optimally prior to delivery, about their wishes to breastfeed and a shared decision about separation should be made.


Pregnancy and COVID-19 Resources for Health Care Providers:
Newborn Admission

Asymptomatic Newborn, Asymptomatic Parent and Able to Care for Newborn:
A discussion should occur between the patient and the healthcare team to reach a mutual decision about where the newborn will receive care.

A patient and newborn can room-in if that is the mutual decision. The newborn should be placed in an isolette or placed at least 6 feet from the parent. The parent should wear a mask and practice hand hygiene whenever handling the neonate. If the birth person directly breastfeeds the neonate, the birth person must wear a mask and use meticulous hand hygiene. If the birth person chooses, she may express breast milk after appropriate hand hygiene, and this may be fed to the newborn by another caregiver.

If the newborn is not rooming-in, the asymptomatic newborn should be placed in an isolette in a private room or designated isolation area in the newborn nursery or post-partum unit separated from unaffected newborns and must maintain COVID-19 isolation. Gown, gloves, surgical mask with face shield or eye protection are used for encounters with newborns. If the birth person chooses, the birth person may express breast milk after appropriate breast and hand hygiene, and this may be fed to the newborn by a healthy caregiver. The parent must wear a mask and practice good hand hygiene for any newborn contact.

Testing of asymptomatic newborns can facilitate plans for their care after hospital discharge. If available, perform COVID-19 testing of the newborn > 24 hours of age and monitor. Newborns should be bathed as soon as body temperature has recovered to normal after birth to remove any virus potentially present on skin surfaces. If the newborn and birth person remain well, they may be discharged home without the newborn’s COVID-19 test results. Provide the family with anticipatory guidance regarding COVID-19 infection in newborns. Establish timely follow-up with infant’s health care provider and verbally inform follow-up staff of suspected/confirmed status. The newborn should be closely followed through 14 days after birth and parents should be informed of the importance to immediately contact the healthcare provider if the infant develops symptoms. Onset of new symptoms consistent with COVID-19 should prompt reassessment of testing needs depending on symptom severity and disposition. Education about caregiver use of masks and hand hygiene should be provided to all caregivers.

If the patient’s COVID-19 testing comes back negative and the patient is no longer considered a suspect case, COVID-19 precautions for the patient may be discontinued and routine well-baby follow-up should occur. COVID-19 positive parent addressed below.

Asymptomatic Newborn, Symptomatic Parent and NOT Able to Care for Newborn:
An asymptomatic newborn should be placed in an isolette in a private room or designated isolation area in the newborn nursery or post-partum unit separated from unaffected newborns and must maintain COVID-19 isolation. Gown, gloves, surgical mask with face shield or eye protection are used for encounters with newborns. If the birth person chooses, they may express breast milk after appropriate breast and hand hygiene, and this may be fed to the newborn by another caregiver. If available, perform COVID-19 molecular testing of the newborn ≥ 24 hours of age and monitor. Newborns should be bathed as soon as body temperature has recovered to normal after birth to remove any virus potentially present on skin surfaces.
When the newborn and patient are ready for discharge, they may be discharged home without the newborn’s COVID-19 test results. The newborn may be discharged prior to the patient if the newborn is well and the patient requires further hospitalization. Provide the family with anticipatory guidance regarding COVID-19 infection in newborns. Establish timely follow-up and with infant’s health care provider and verbally inform follow-up staff of suspected/confirmed status. The newborn should be closely followed through 14 days after birth and parents should be informed of the importance to immediately contact the healthcare provider if the infant develops symptoms. Onset of new symptoms consistent with COVID-19 should prompt reassessment of testing needs depending on symptom severity and disposition. Education about the use of masks and hand hygiene should be provided to all caretakers.

If the patient’s COVID-19 testing comes back negative and the patient is no longer considered a suspect case, COVID-19 precautions for the patient may be discontinued and routine well-baby follow-up should occur.

If the patient’s COVID-19 testing comes back positive, the patient should maintain a distance of at least 6 feet when possible, and use a mask and hand-hygiene when directly caring for the infant, until EITHER (a) the patient has been afebrile for 72 hours without use of antipyretics and (b) at least 10 days have passed since the patient’s symptoms first appeared (or, in the case of asymptomatic patients identified only by obstetric screening tests, at least 10 days have passed since the positive test); OR the patient has negative results of a SARS-CoV-2 test from at least two consecutive specimens collected > 24 hours apart.

**Newborns requiring Neonatal Intensive Care Unit (NICU) care:**
A newborn requiring intensive care optimally should be placed in a single patient room with negative pressure, if available, or in a room with the door closed. If this is not available, or you must cohort, maintain at least 6 feet between newborns or keep them in air-temperature controlled isolettes. A surgical mask with face shield or eye protection, gown and gloves should be worn.

If an aerosol generating procedure is required or anticipated, an N-95 mask should be added. Ideally, the newborn should be in a negative pressure room if available; if this is not possible or it is an emergent procedure, ensure the patient is in a room with the door closed. Examples of aerosol generating procedures include: open suctioning of airways, BiPAP/CPAP high flow nasal cannula, nebulizer treatment (try to substitute metered dose inhaler), bag-mask ventilation, bronchoscopy, active intubation/extubation or manipulation of a tracheostomy tube.

Perform COVID-19 testing of the NICU newborn ≥ 24 hours of age. Newborns should be bathed as soon as body temperature has recovered to normal after birth to remove any virus potentially present on skin surfaces. There is not enough evidence at this time to recommend when testing for COVID-19 should be repeated; however, repeat testing may be useful for newborn placement and isolation decisions. Two sequential negative COVID-19 tests can be used as criteria for these decisions. In the NICU, consider retesting the newborn between 48 to 72 hours, if testing is available.

- If the neonate tests positive for COVID-19 at 24 hours, continue isolation in a negative pressure room, if available. Otherwise ensure the neonate is in a room with the door closed. Continue the use of a surgical mask with face shield or eye protection, gown and gloves and if aerosolization is anticipated, add an N-95 respirator, if available. Continue to test the neonate every 48 to 72 hours until two consecutive negative COVID-19 tests are obtained. Once the neonate is negative for COVID-19 (two sequential negative
tests), they may be moved to the general NICU population and cared for with routine universal precautions.

- Neonates who test negative for COVID-19 at 24 hours, also need two sequential negative COVID-19 tests (this includes the first negative test). Continue isolation in a negative pressure room, if available. Otherwise ensure neonate is in a room with the door closed. Continue the use of a surgical mask with face shield or eye protection, gown and gloves and if aerosolization is anticipated, add an N-95 respirator, if available. Consider repeating the COVID-19 test between 48 to 72 hours after the first test. After two sequential negative COVID-19 tests, the neonate may be moved to the general NICU population and cared for with routine universal precautions.

- If the patient’s COVID-19 testing comes back negative and the patient is no longer considered a suspect case, the neonate may be moved to the general NICU population and cared for with routine universal precautions.

**Testing**

The nasopharyngeal swab is the preferred sample for molecular testing for COVID-19; if this is not possible, an oropharyngeal swab should be obtained. Place the swab in viral transport media.

If using a laboratory other than the Wadsworth Center, follow the laboratory’s guidance for all specimen collection, handling, and transport processes.

If using the Wadsworth Center, package the nasopharyngeal or oropharyngeal swab vial with the appropriate paperwork for shipment, to the lab in accordance with NYSDOH Wadsworth Center specimen collection, storage, and packaging guidance.

- **NOTE:** The nasopharyngeal swab must be transported to Wadsworth Center within 24 hours of specimen collection.

NYSDOH Wadsworth Center COVID-19 Specimen Collection, Handling and Transport Instructions:

**Breastfeeding**

In limited studies, COVID-19 has not been detected in breast milk; however, we do not know for sure whether birth persons with COVID-19 can spread the virus via breast milk. Breastfeeding may be beneficial to the newborn of a birth person who is confirmed or suspected for COVID-19 as the mother’s antibodies may provide some protection for the baby. This will be dependent on the gestational age of the baby.

Temporary separation of the birth person and newborn may minimize the risk of postnatal infection from maternal respiratory secretions. The benefits of temporary separation may be greater in patients with more serious illness. A discussion with the patient should occur, optimally prior to delivery, about the wishes to breastfeed and a shared decision about separation should be made.
Birth persons who decide to room in and/or who decide to directly breastfeed their baby should use a surgical or procedure mask and perform meticulous hand hygiene before all contact with the baby. When not being fed, the baby should be placed in an air-temperature controlled isolette, or should be placed in a bassinette 6 feet from the mother.

If the patient is too ill to breastfeed, or if the patient decides to pump and not directly breastfeed, breast milk can be pumped and provided to the baby. Proper precautions such as hand hygiene practices before touching the equipment and using clean equipment are essential. Each patient should have a dedicated breast pump, if possible. It should be cleaned, rinsed, and dried according to the manufacturers recommendations and stored away from where others might touch it. The expressed breast milk should be fed to the baby by a healthy caregiver.

Bottles of expressed breast milk brought in for babies who remain hospitalized should be wiped down on the outside with alcohol before the milk is used.

Donor human milk may also be considered for babies. The Human Milk Banking Association of American (HMBNA) explains the safeguards put into place to ensure the donor milk provided is safe. The HMBNA requires their milk bank members to follow guidelines that support the screening, handling and distribution of a safe donor milk.

All donor persons are rigorously screened regarding international travel and recent illness, including family illness. Donor persons are tested for HIV, HTLV, syphilis and Hepatitis B and C to make sure they are not ill before donation begins. While COVID-19 is a newly identified virus, it has genetic similarities to the SARS corona virus. Studies have shown that SARS and MERS are completely inactivated by heat. All donor milk dispensed by HMBANA members undergo the heat inactivation process before it is dispensed. Also, donor milk is not dispensed until a culture is negative for bacteriologic growth.

Limited studies of persons with SARS have not demonstrated that this virus is detected in breast milk. While it is not known whether persons with COVID-19 can transmit the virus via breast milk, the advantages provided by breast milk must be considered.

AAP issues guidance on infants born to mothers with suspected or confirmed COVID-19: https://www.aappublications.org/news/2020/04/02/infantcovidguidance040220

Academy of Breastfeeding Medicine, Statement on Coronavirus 2019: https://www.bfmed.org/abm-statement-coronavirus


Is it Safe to Provide Milk for My NICU Baby if I Have or Have Been Exposed to Coronavirus Disease 2019 (COVID-19)?: https://www.larsson-rosenquist.org/media/1353/2003_nicu_babies_covid19.pdf

Milk Banking and COVID-19: https://www.hmbana.org/file_download/inline/a04ca2a1-b32a-4c2e-9375-44b37270cfbd
Newborn Screenings During COVID-19
If a newborn is discharged early, newborn screening must still be addressed per below:

Newborn Hearing Screening:
While ideally hearing screening is performed as close to discharge as possible, it may be conducted as soon as 6 hours after birth. However, early screening may result in an increase in false positive results due to vernix/debris in the newborn’s ears. If a newborn fails the hearing screening or it is not done prior to discharge, parents must receive instructions to obtain hearing screening post-discharge and be referred to their county Early Intervention Program for child-find/tracking purposes to ensure follow up occurs.

Newborn Bloodspot Screening for Metabolic and Other Disorders:
Collect a specimen prior to discharge. If the specimen is collected at 24 hours of age or older, no further specimen is required. If the specimen is collected at less than 24 hours old, a repeat specimen should be collected at 24 hours of age or older. Send the parent home with a blood collection card with instructions to have a follow-up specimen collected. The need to conduct a repeat newborn screening should be clearly communicated to infant’s health care provider and follow up arranged prior to discharge. If the primary care physician’s office is not available, follow up should be addressed as to how the infant will be tested again as soon as possible. Make sure the parent understands that this is important and provide her with a “For Your Baby’s Health” brochure.

A frequently asked question document was sent to Newborn Screening Coordinators at birth hospitals dated 3/26/2020.

Critical Congenital Heart Disease (CCHD) Screening
Complete pulse oximetry prior to discharge, even if the newborn is less than 24 hours old. Follow up should occur per the hospital’s CCHD Screening protocol.

Discharge of Newborns Born to Patients with Confirmed COVID-19

Newborn with negative test results: Discharge the newborn, ideally, to the care of a designated healthy caregiver.

The patient should maintain a 6-foot distance when possible and use a mask and hand hygiene when directly caring for the newborn until either a) the patient has been afebrile for 72 hours without use of antipyretics and b) at least ten days have passed since the symptoms first appeared; or the patient has negative results from a COVID-19 test from at least two consecutive specimens collected 24 or more hours apart.

Other caregivers in the home with suspected COVID-19 infection should use cloth masks and hand hygiene when they are within 6 feet of the newborn until their own status is resolved.
Education should be provided to all caregivers and include written as well as verbal education in person, via telephone or virtually. Utilize interpreter services when appropriate. The caregiver should use a cloth mask and hand hygiene when taking care of the newborn through 14 days after birth.

Newborns with positive test results: If the infant has positive test results but no signs of COVID-19, the infant should be followed up frequently as an outpatient (phone, telemedicine, or in-office) through 14 days after birth. Use precautions to prevent household spread to infant caregivers.

Health Advisory: Symptom based strategy to discontinue home isolation for persons with COVID-19

Interim guidance for persons who may have 2019 Novel Coronavirus (2019-nCoV) to prevent spread in homes and residential communities:

AAP FAQs: Management of Infants Born to COVID-19 Mothers
Initial Care of Newborns Born to Mothers with Suspected or Confirmed COVID-19 (4/10/2020)

Mom with suspected or confirmed COVID-19 → L&D Huddle for Triage Plan → Alert WB or NICU Delivery Team → Infant delivered

Infant delivered
Stabilized on warmer
Placed in isolette for transport

Sick Baby
NICU Isolation
Negative pressure (if available)
or room with closed door

If mother is confirmed COVID-19: COVID-19 testing for baby > 24h & after early bath

Baby confirmed COVID-19?
YES
NICU Isolation Room Negative pressure (if available) or room with closed door

NO
Two sequential negative COVID-19 tests to remove infant from isolation

Baby well
Mom well (suspected/confirmed COVID-19)
is Able to care for baby

Baby well
Mom well (suspected/confirmed COVID-19)
NOT Able to care for baby

Baby placed in post-partum cohort room or newborn nursery isolation with COVID-19 testing for baby ≥ 24h & after early bath

Mother is able: Baby is rooming-in
Mother unwilling: baby cohorted in post-partum room or isolation area

All babies get contact/droplet precautions for well babies;
can group 6 feet apart & preferably in isolette

Discharge infant home. No need to wait for baby test results. Provide family with anticipatory guidance re: COVID-19 infection risks to minimize horizontal infection. Provide CDC guidelines for household strategies & breast feeding techniques; assure support system

LDR Staff
1) Arranges PPE
2) Prepares neonatal resuscitation program delivery equipment and resuscitation team composition

UPDATES
If delivery is not imminent alert pediatric team q shift to status

Isolation and Personal Protective Equipment (PPE) for Suspected or Confirmed COVID-19 Delivery Room Patients = Assume DR is aerosol-generating area, thus airborne protection + contact protection whether c/s or vaginal
Aerosol Generating Procedures = Open suctioning of airways (Ballard is closed); high flow nasal cannula, BiPAP/CPAP, un-cuffed ET tubes, mechanical ventilation. Other: bronchoscopy, active intubation/extubation, nebulizer treatment
Contact/droplet/standard PPE = Surgical or procedure mask, face shield or goggles, gown, gloves
Airborne Procedures in Suspected or Confirmed COVID-19 Patient (mother or baby) = N95 face mask, face shield or goggles, gown, and gloves